

ANALYTICS

Smarter transport in Kazakhstan

Qlik supports enhanced Situation
Center analytics capabilities for
national Transport Committee





CUSTOMER STORY

“Qlik has enabled us to create a one-stop digital analytical environment for the Transport Committee, saving hundreds of man-hours each month by automating internal data management processes.”

Shyngys Kazhybasov, Transport Digital Transformation Office Chief, Kazakhstan MIID

A range of responsibilities

The Ministry of Industry and Infrastructural Development (MIID) is a central executive body of the government of Kazakhstan. Its primary role is the development and implementation of policy in the fields of industrial, scientific and technical development. It is composed of a series of departments and committees, each with its own specific projects and responsibilities.

Since 2013, the MIID’s Transport Committee has operated a Situation Center that analyzes the transport sector in Kazakhstan. It oversees the operation of vehicle monitoring stations, gathers real-time reports on road, air, rail and water transport safety, and tracks the status of roads, border crossing points and passenger transport volumes.

The Transport Committee is responsible for issuing a range of vehicle permits, involving processes that need to be monitored constantly to ensure that services are up to standard and delivered promptly. It also receives numerous requests from the President, Prime Minister and other Kazakh government officials.

Identifying key processes and priorities

It was as part of the government’s Digital Kazakhstan project, which launched in 2018, that the Transport Committee decided to reassess its analytics processes.

Committee and Situation Center staff were manually acquiring data from Oracle, MySQL and other sources, processing it using spreadsheets and manually building PowerPoint presentations to communicate the results of their analysis.

Solution Overview

Customer Name

Kazakhstan Ministry of Industry and Infrastructural Development

Industry

Public Sector

Geography

Kazakhstan, EMEA

Function

IT, Supply Chain Management

Business Value Driver

Reimagined Processes

Challenges

- Streamline and optimize operations
- Acquire and process high volumes of data from multiple sources
- Improve analysis, tracking and presentation processes

Solution

Qlik powers 16 applications, analyzing key areas including transport, vehicle monitoring stations, document workflows and procurement.

Results

- Automated workflows across the entire statistics department
- 400 man-hours saved per month on report generation
- Analytical data now actively used by Situation Center and ministerial staff

This time-consuming and labor-intensive system was cumbersome and prone to error, often missing critical KPIs and other data points.

“All data on real-time situations was consolidated from disjointed spreadsheets into a single report that was then presented to the Minister of Transport,” explains Shyngys Kazhybasov, Transport Digital Transformation Office Chief at the MIID. “The human resources involved were very substantial.”

It was time to make a change. Transport Committee staff drew up a list of requirements, including the need to carry out associative search and analysis without strict data-formatting requirements, the ability to aggregate data from multiple spreadsheets and other sources with no manual intervention, and access to a broad range of presentation and visualization options. A means of monitoring document workflows in response to ministerial requests was also identified as a key requirement. As a government department, strict security and data integration requirements were a critical priority.

In 2019, Kazhybasov turned to Vitaliy Trenkenshu, CEO at Kazakh consultancy Datanomix.pro. It was Trenkenshu who introduced the Transport Committee to Qlik.

A transformative solution

An experienced Qlik integrator, Trenkenshu and his team saw that Qlik Sense would meet every requirement on Kazhybasov’s wish-list and provide additional functions to further enhance the Transport Committee’s capabilities.

It took Datanomix.pro only six months to automate 26 internal analytical business processes and develop 16 analytical applications. The result, however, was transformative.

Qlik became the core of the Transport Committee’s analytical landscape, combining data from Oracle, MySQL and cloud storage and funneling it into active use by the Situation Center and deputy ministers. The committee also consolidated all real-time report data in a single Qlik application and granted access to MIID staff.

“I would identify three key project success factors: the Qlik Sense technology, the agile approach and the customer’s involvement,” says Trenkenshu. “This enabled the team to be extremely productive and release an application every three weeks.”

Real-time information on critical functions

Now fully deployed, the Qlik solution has automated the workflows of the entire statistics department, drastically reduced the number of routine data-handling operations, enhanced the Situation Center’s efficiency and enabled effective cross-agency cooperation.

Qlik analytics now help to detect violations at vehicle monitoring stations across Kazakhstan and increase the depth of data on vehicles inspected, with findings fed into a dedicated internal system integrated with Qlik. Performance can be tracked across the country by vehicle and station type, country of registration, even down to a specific inspector. Overall, Qlik’s optimization of the reporting process for vehicle monitoring stations is saving 256 man-hours each month.

For the Transport Committee’s permit-issuing operation, Qlik integrates with the public services system to display current information on the number of services provided, their status, and the agencies providing and receiving them. A dedicated report also details critical delivery timelines, providing real-time information on any risks of delays.

Another new analytical tool is the document workflow report, which shows how many monitored documents are in progress, the process owner and completion timeline. Committee members use this information during meetings to track the progress of requests and be alerted to any potential delays. Qlik’s automation capabilities now save over 1,000 man-hours annually on this process.

New levels of analysis

In three years, Qlik has established itself at the core of analytical work at the MIID Transport Committee, substantially increasing both the speed and efficiency of its data usage. Overall, Qlik has helped to automate 18 data-intensive processes and halved the labor intensity of report preparation by 400 man-hours per month. The Situation Center’s new visualization capabilities have also enabled the number of reports needed to be cut from 42 to just 26.

“With Qlik, the minister and all his staff always have the latest interactive data at their fingertips and can respond efficiently depending on the situation,” says Kazhybasov. “Furthermore, the human resources that have been freed up from routine data processing have been given higher-level analytical assignments.”

Such is the project's success, the MIID has recommended similar deployments in all its areas of responsibility, including civil aviation, defense, construction, housing and utilities.

"Qlik Sense enables teams to focus on results instead of solving technical issues," concludes Trenkenshu. "It's also given Transport Committee staff much-needed creative freedom, enabling them to bring countless new ideas to life."

The keys to success



400

man-hours per month saved on report generation



70%

of data-intensive business processes have been automated

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Shyngys Kazhybasov, Transport Digital Transformation Office Chief, Kazakhstan MIID



About Qlik

Qlik's vision is a data-literate world, where everyone can use data and analytics to improve decision-making and solve their most challenging problems. Our cloud-based Qlik Active Intelligence Platform® delivers end-to-end, real-time data integration and analytics cloud solutions to close the gaps between data, insights and action. By transforming data into Active Intelligence, businesses can drive better decisions, improve revenue and profitability, and optimize customer relationships. Qlik does business in more than 100 countries and serves over 38,000 active customers around the world.

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